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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,095	11/17/2003	Kia Silverbrook	ZG015US	4131
24011	7590	05/24/2004		
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA				
EXAMINER				
GORDON, RAQUEL YVETTE				
ART UNIT		PAPER NUMBER		
2853				

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/713,095

Applicant(s)

SILVERBROOK, KIA

Examiner

Raquel Y. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/17/2003 (Application and IDS).
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/302,556.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/17/2003
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 are rejected under the judicially created doctrine of double patenting over claims 1-8 of U. S. Patent No. US006666543B2 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

1. A micro-electromechanical fluid ejection device that comprises:

a substrate that incorporates drive circuitry (claim 3/2/1);

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nozzle chamber walls and a roof that are positioned on the substrate to define a nozzle chamber with the roof defining a fluid ejection port in fluid communication with the nozzle chamber (claim 1);

an fluid-ejecting member that is operatively positioned with respect to the nozzle chamber, the fluid-ejecting member being displaceable with respect to the substrate to eject fluid from the (claim 1);

fluid ejection port; an actuator that is connected to the fluid-ejecting member and to the driving circuitry the actuator being displaceable upon receipt of an electrical signal from the drive circuitry to displace the fluid-ejection member and thus eject fluid from the fluid ejection port (claim 1); and

and a covering formation positioned on the substrate so that the substrate and the covering formation define an air chamber, the actuator being positioned within the air chamber (claim 1);

2. A printhead chip as claimed in claim 1, which is the product of an integrated circuit fabrication technique (claim 2);

3. A printhead chip as claimed in claim 2, in which the substrate includes a silicon wafer substrate, a CMOS drive circuitry layer positioned on the

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silicon wafer substrate and an ink passivation layer positioned on the CMOS drive circuitry layer (claim 3);

4. A printhead chip as claimed in claim 3, in which each fluid-ejecting member is positioned in its respective nozzle chamber and is displaceable towards and away from the fluid ejection port (claim 4);

5. A printhead chip as claimed in claim 3, in which each nozzle arrangement includes a work-transmitting structure that is displaceable with respect to the substrate and is connected to the fluid-ejecting member so that displacement of the work-transmitting structure results in displacement of the fluid-ejecting member, the actuator being connected to the work-transmitting structure to displace the work-transmitting structure (claim 5);

6. A printhead chip as claimed in claim 5, in which the roof, the work-transmitting structure and the covering formation together define a protective structure that is positioned in a common plane (claim 6);

7. A printhead chip as claimed in claim 3, in which a plurality of fluid inlet channels are defined through the substrate, with each fluid inlet channel opening into a respective nozzle chamber (claim 7);

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8. A printhead chip as claimed in claim 6, in which the roof, the work-transmitting structure and the covering formation are configured so that the protective structure is unitary (claim 8).

It is further the Examiner's position claims 3/2/1 of US 6666543 B2 clearly anticipate each element of claim 1 as presented in the instant application.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claims 1 and 5-7 are provisionally rejected under the judicially created doctrine of double patenting over claims 1, 2, and 6/4/3/2/1 of copending Application No. 10/713070. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

1. A micro-electromechanical fluid ejection device that comprises:

a substrate that incorporates drive circuitry (claim 1);

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nozzle chamber walls and a roof that are positioned on the substrate to define a nozzle chamber with the roof defining a fluid ejection port in fluid communication with the nozzle chamber (claim 6/4/3/2/1);

an fluid-ejecting member that is operatively positioned with respect to the nozzle chamber, the fluid-ejecting member being displaceable with respect to the substrate to eject fluid from the (claim 3/2/1);

fluid ejection port; an actuator that is connected to the fluid-ejecting member and to the driving circuitry the actuator being displaceable upon receipt of an electrical signal from the drive circuitry to displace the fluid-ejection member and thus eject fluid from the fluid ejection port (claim 3/2/1); and

and a covering formation positioned on the substrate so that the substrate and the covering formation define an air chamber, the actuator being positioned within the air chamber (claim 1).

2. A printhead chip as claimed in claim 1, which is the product of an integrated circuit fabrication technique.

3. A printhead chip as claimed in claim 2, in which the substrate includes a silicon wafer substrate, a CMOS drive circuitry layer positioned on the

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silicon wafer substrate and an ink passivation layer positioned on the CMOS drive circuitry layer.

4. A printhead chip as claimed in claim 3, in which each fluid-ejecting member is positioned in its respective nozzle chamber and is displaceable towards and away from the fluid ejection port.

5. A printhead chip as claimed in claim 3, in which each nozzle arrangement includes a work-transmitting structure that is displaceable with respect to the substrate and is connected to the fluid-ejecting member so that displacement of the work-transmitting structure results in displacement of the fluid-ejecting member, the actuator being connected to the work-transmitting structure to displace the work-transmitting structure.

6. A printhead chip as claimed in claim 5, in which the roof, the work-transmitting structure and the covering formation together define a protective structure that is positioned in a common plane.

7. A printhead chip as claimed in claim 3, in which a plurality of fluid inlet channels are defined through the substrate, with each fluid inlet channel opening into a respective nozzle chamber.

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8. A printhead chip as claimed in claim 6, in which the roof, the work-transmitting structure and the covering formation are configured so that the protective structure is unitary.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (703) 308-0022. The Examiner can normally be reached on M Tu Th and F 8:30-6:00. Effective February 11, 2003, Ex. Gordon, can be reached at the new PTO facility at (571) 272-2145.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on 703-308-4896. Effective February 11, 2003, the supervisor can be reached at the new PTO facility at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432. A new fax number will be forthcoming.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. A new status inquiry number will be forthcoming.



Raquel Y. Gordon
Primary Examiner
Art Unit 2853
May 12, 2003

RAQUEL GORDON
PRIMARY EXAMINER